

REMARKS

Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.116 and in light of the remarks which follow, are respectfully requested.

By the above amendments, independent claims 1, 15 and 18 have been amended for clarification purposes to recite that the polymer and the oil-soluble dye are separate compounds. Support for these amendments can be found in the instant specification at least at pages 18-32 and 42-46, which sets forth exemplary polymers and oil-soluble dyes which are separate compounds. Claim 2 has been amended for readability purposes to delete the word "and" after the phrase "each represents independently." Claims 16, 18 and 19 have been amended for readability purposes by adding commas in the text thereof. Entry of the above amendments is proper at least because they place the application in condition for allowance or in better form for appeal. See M.P.E.P. §714.12.

In the Official Action, claims 1-3, 5 and 8-23 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,025,412 (*Sacripante et al*) or U.S. Patent No. 6,031,019 (*Tsutsumi et al*) either of which in view of Japanese Patent Document No. 09-059552 (*JP '552*).¹ Claims 1-5 and 8-23 stand rejected under 35 U.S.C. §103(a) as being obvious over *Sacripante et al* or *Tsutsumi et al* either of which in view of Japanese Patent Document No. 03-231975 (*JP '975*). Withdrawal of these rejections is respectfully requested for at least the following reasons.

¹The Patent Office's citation of "JP 09059522" appears to contain a typographical error, i.e., the proper citation appears to be "JP 09059552."

Sacripante et al relates to waterfast inks for use in ink jet printing processes (col. 1, lines 5 and 6). *Sacripante et al* discloses an ink composition formulated by chemically incorporating a dye into an emulsifiable polymeric resin (col. 3, lines 25-27).

JP '552 relates to an inkjet recording liquid containing a dye. *JP '975* relates to an ink jet recording method wherein a recording solution is sprayed onto an image reception material for recording an image.

The alleged combination of *Sacripante et al* with *JP '552* or *JP '975* does not render the presently claimed invention *prima facie* obvious. In this regard, the alleged combination of *Sacripante et al* with *JP '552* or *JP '975* would not have resulted in coloring particulates comprising a polymer and an oil-soluble dye which are separate compounds, as recited in claims 1, 15 and 18. In stark contrast with the present invention, *Sacripante et al* discloses that "the dye is chemically attached to the emulsifiable polymer resin, as either a main chain constituent or a side chain constituent, rather than being separately mixed with a polymer resin [emphasis added]" (col. 3, lines 43-46). Moreover, the Patent Office has acknowledged that *Sacripante et al* discloses a dye which is chemically attached to the polymer either as a main chain constituent or a side chain constituent (Official Action at page 3).

For at least the above reasons, it is apparent that no *prima facie* case of obviousness exists with respect to the combination of *Sacripante et al* with *JP '552* or *JP '975*. Accordingly, withdrawal of the rejections based on such combination of applied documents is respectfully requested.

Tsutsumi et al discloses an aqueous ink for inkjet printing (col. 2, lines 51-54). As acknowledged by the Patent Office at page 4 of the Official Action, *Tsutsumi et al* fails to

disclose or suggest the oil-soluble dye recited in independent claims 1, 15 and 18. The Patent Office has relied on *JP '552* or *JP '975* for disclosing the oil-soluble dye recited in the claims. However, as shown in the attached Declaration Under 37 C.F.R. §1.132 of Takahiro Ishizuka (Declaration) and the test results set forth in the instant specification, the present invention provides surprising and unexpected results in the form of improved stability when compared with an ink formed from a dye and a polymer disclosed by *Tsutsumi et al.*

As discussed in the Declaration at page 2, a Comparative Example was prepared in the same manner as Production Example 1 described at pages 75 and 76 of the instant specification, except that a dye and a polymer disclosed by *Tsutsumi et al* were used in order to evaluate the stability of an ink formed therefrom. In particular, the polymer (P-5) used in Production Example 1 was substituted with the polyester obtained in accordance with Preparation Example 2 at column 16 of *Tsutsumi et al.* As well, the oil-soluble dye (I-11) used in Production Example 1 was substituted with Solvent Black 3, which the Declaration states is the same as Oil Black 860 used in Preparation Example 2 of *Tsutsumi et al.*

In order to evaluate the stability of the ink over time, the Comparative Example produced by the above procedure was left at 25°C for 1 week and then filtered through a 0.2 µm filter. The degree of coloration of the filter was visually evaluated using the following three ranks: A (no or less coloration), B (slight coloration) and C (significant coloration). As discussed in the Declaration at page 2, the Comparative Example employing the polymer and dye of *Tsutsumi et al* exhibited a rank C, i.e., the filter exhibited significant coloration. Thus, as set forth in the Declaration, the Comparative Example was found to be insufficient as an ink.

By comparison, referring to Table 2 at page 82 of the instant specification, Example 1 exhibited a stability of rank A, i.e., the filter exhibited no or less coloration.² Furthermore, as can be seen from Table 2, eight of the nine exemplary inventive inks which were tested exhibited no or less coloration of the filter (rank A), and the other exemplary inventive ink caused only slight coloration of the filter (rank B). None of the tested exemplary inventive inks set forth in Table 2 caused significant coloration of the filter (rank C).

The experimental test results set forth in Table 2 of the instant specification show that the exemplary inventive inks can provide good stability with time. Moreover, upon comparing the stability of the inventive inks with the Comparative Example, it is apparent that the present invention can provide surprising and unexpected results in the form of improved stability over time.

For at least the above reasons, it is apparent that the present invention is not obvious over the combination of *Tsutsumi et al* with *JP '552* or *JP '975*. Accordingly, withdrawal of the §103(a) rejections based on the above combined applied documents is respectfully requested.

At page 2 of the Official Action issued November 22, 2002 (Paper No. 9), the Patent Office has indicated that a new Notice of References Cited (form PTO-892) citing U.S. Patent No. 6,031,019 has been attached to the Official Action. However, Applicants' copy of the Official Action does not contain a copy of the new Notice of References Cited. Accordingly, it is respectfully requested that a copy of same be mailed to the undersigned.

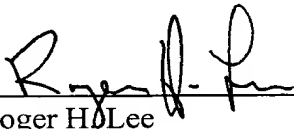
²As discussed at page 81 of the specification, in the testing of the inks, Example 1 of the present invention was left for 1 month, whereas the Comparative Example was left for only one week.

Application No. 09/780,402
Attorney's Docket No. 003510-076

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By: 
Roger H. Lee
Registration No. 46,317

P.O. Box 1404
Alexandria, VA 22313-1404
(703) 836-6620

Date: November 14, 2003